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... system operations. Paravirtualized Linux is compared with native Linux running on bare metal H/W without VMM. Direct performance ...

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... It should be noted that a transparently paravirtualized kernel must support the native boot sequence, so our implementation does not attempt to change that ...

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 ... the same socket. In the experiments, we used Linux 2.6.18 in native mode
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 utilization under native Linux 2.2.17. Even in the paravirtualized Xen 2.0 VMM ...

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 tion from the executing instruction stream, a paravirtualized ...

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P Barham, B Dragovic, K Fraser, S Hand, T Harris, ... - Proceedings of the nineteenth ACM symposium on Operating 2003 - [portal.acm.org](#)
 ... performance. Note that our paravirtualized x86 abstraction is quite different
 from that proposed by the recent Denali project [44]. ...
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K Mansley, G Law, D Fiddoch, G Barzini, N Turlton, ... - Springer
 ... compared with other virtualization technologies, yet its performance is well below
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 ... run in user processor mode both under a VMM and on native hardware. ... monitor [10]

interacts with its guest OS instances via a paravirtualized architecture very ...

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K Fraser, S Hand, C Limpach, I Pratt, D ... - Linux Symposium - [landley.net](#)

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[Dynamic Virtual Clustering with Xen and Moab](#)

W Emekciler, D Jackson, J Butikofer, D Stanzione - Proceedings of ISPA Workshops: Workshop on Xen in HPC ..., 2008 - Springer

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S Santhanam, P Elango, A Arpaci-Dusseau, M Livny - Second Workshop on Real, Large Distributed Systems (WORLDS ..., 2005 - [usenix.org](#)

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... and memory resources have very low overhead leading to near native performance [29 ... In this approach, the guest OS executes a paravirtualized (PV) driver that ...

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S Soltesz, ME Fluczynski, L Peterson, M McCabe, J ... - Submitted to Eurosys, 2006 - cs.princeton.edu
 ... below attacks, undercutting a previously established reason for using paravirtualized systems. ... Guest OSs (typically dom0) can use their native device drivers ...
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GW Dunlap, DG Lucchetti, MA Fetterman, PM Chen - Proceedings of the fourth ACM SIGPLAN/SIGOPS International ...
 2008 - portal.acm.org
 ... sharing, we modified the Xen hypervisor[2]. Xen supports paravirtualized guests:
 that is ... rather than the hypervisor emulating the interface of native hardware. ...
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[PDF] Evaluating the Impact of Xen on the Performance of NAS Parallel Benchmarks

L Yousefi, R Woiski, B Gorda, C Krintz - The Second Annual Graduate Student Workshop on Computing -
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 ... efficiently. Paravirtualized systems thus, have the potential for improved
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 ... architecture [5]. Privileged domains, called 'driver' domains, use their native
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J Franklin, M Luk, JM McCune, A Seshadri, A Perrig ... - Journal of Computer Security (Special Issue on Security of ...,
 2007 - sparrow.ece.cmu.edu
 ... 4 Page 5. Vanilla Linux VMware Workstation Paravirtualized Xen 3.0.2 SVM Xen
 3.0.2 Local Router Local Verifier Remote Verifier Internet ...
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AP Kunze, SD Goglin, EJ Johnson - Proceedings of the 2006 ACM/IEEE symposium on Architecture ..., 2006 -
 portal.acm.org
 ... of guest operating systems when compared to running the guests on native hardware. ...

For the general purpose OS, we used the paravirtualized Linux that Xen calls ...

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L Tan, EM Chan, R Farivar, N Mallick, JC Carlyle, ... - [Proceedings of the Third IEEE International Symposium on ...](#), 2007 - [doi.ieeeecomputersociety.org](#)

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... these transac- tions it is impossible to understand the native behavior of a ... In its current form, it only supports paravirtualized hosts — requiring source ...

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J Franklin, M Luk, JM McCune, A Seshadri, A Perrig ... - in *Botnet Detection*, Springer, 2007 - Springer

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E Damiani, F Frati, D Rebecani - FOSLET 2006 - elearninglab.org
... architecture. Its paravirtualized virtual machine monitor or hypervisor permits to achieve performance close to native hardware. More ...
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[Optimizing TCP Receive Performance](#)
A Menon, W Zwaenepoel - USENIX Annual Technical Conference, 2008 - usenix.org
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[PDF] [Migrating User Mode Linux to Xen and Kernel Based Virtual Machines](#)
A Lambeck - basiscodv.de
... better performance than a hardware-based VMM. The latter runs near native performance when compared to kernel. In this text, paravirtualized guests are used. ...
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S Bhatia, M Motwala, W Muhlbauer, V Valancius, A ... - www.feldmann.in.tum.de
... translate instructions that potentially interact with the native hardware (though ... Typically, fully virtualized and paravirtualized systems can provide better ...

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H Raj, B Seshasayee, KJ O'Hara, R Nathuji, K ... - LECTURE NOTES IN COMPUTER SCIENCE, 2006 - Springer
... performance, higher operating costs and difficulty in accessing native resources
such as ... We configured VMs with 32MB RAM, running paravirtualized 2.6.12 linux ...

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J Lu, L Makhlis, J Chen - CMG-CONFERENCE, 2006 - daschmeizer.com
... Privileged instructions are paravirtualized by requiring them to be validated
and executed within Xen. ... Native Device Drivers GuestOS (XenLinux) ...

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D Gupta, K Vishiwanath, A Vahdat - usenix.org
... be run on physical machines directly (for the paravirtualized setup, we do ... operating
systems and hardware will increasingly support native virtualization, we ...

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M Anisetti, V Bellandi, A Colombo, M Cremonini, E ... - Education, IEEE Transactions on, 2007 - ieeexplore.ieee.org
... gest that open source virtual laboratories are a valid alter- native to real ... guest
operating system to be modified to run in the paravirtualized envi- ronment ...

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[PDF] Optimizing TCP Receive Performance

S EPFL - infoscience.epfl.ch
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... Alternatively, we install paravirtualized device drivers within the guest ... to full
virtualization, paravirtualization offers performance close to native hardware ...

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A Kivity, Y Kamay, D Laor, U Lublin, A Liguori - Linux Symposium - linux-security.cn
... to that page will be emulated instead of proceeding at native speeds ... A common solution
is to introduce paravirtualized de- vices, or virtual "hardware" that ...

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... resources to physical resources and use the native hardware for ... The paravirtualized
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M Richmond - 2005 - cs.ucsb.edu
... be handled virtually in order to translate them into the native instruction set ... For
example, Xen's "paravirtualized" layer is capable of handling up to ...

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[High performance and scalable I/O virtualization via self-virtualized devices](#) - all 3 versions »

H Raj, K Schwan - Proceedings of the 16th international symposium on High ... 2007 - [portal.acm.org](#)

... does not compare favorably against the net- work performance in native systems

[25]. ... Dom0 runs a paravirtualized Linux 2.6.16 kernel with a Red- Hat Enterprise ...

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[Automated detection of persistent kernel control-flow attacks](#) - all 3 versions »

NL Petroni Jr, M Hicks - Proceedings of the 14th ACM conference on Computer and ..., 2007 - [portal.acm.org](#)

Page 1. Automated Detection of Persistent Kernel Control-Flow Attacks Nick

L. Petroni, Jr. and Michael Hicks Department of Computer ...

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GW Duniap III - 2006 - [eecs.umich.edu](#)

... uniprocessor paravirtualized virtual machine running on a Linux operating

system. ... range of native applications we can log and replay. ...

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[Virtualization Technology](#)

NCVUM Using - Intel Technology Journal, 2006 - [download.intel.com](#)

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... Bridge Driver IO Devices IO Devices Figure 4: Client VMM architecture The services

partition has been modified to be aware of virtualization (paravirtualized). ...

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[Protection Strategies for Direct Access to Virtualized I/O Devices](#)

P Willmann, S Rixner, AL Cox - USENIX Annual Technical Conference, 2008 - [usenix.org](#)

... simple direct-map strategy incurs the least overhead, providing native-level

performance ... reuse for received packets is caused by the paravirtualized (PV) Linux ...

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... L 4 Linux can also be seen as a paravirtualized system as it modifies ... On native Linux,

interrupt work is always executed in the context of the interrupted user ...

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[Remus: High Availability via Asynchronous Virtual Machine Replication](#)

B Cully, G Lefebvre, D Meyer, M Feeley, N ... - [usenix.org](#)

... these modifications are not necessary in the case of non-paravirtualized VMs. ... as

represented by SPECweb perform at somewhat more than one quarter native speed. ...

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[CITATION] [Kernel debugging with GDB](#)

N Mc Gure
Web Search

[PDF] [Security Considerations of Commodity x86 Virtualization](#)

S Vaarala - [samivaarala.com](#)

... A kind of virtualization where the guest OS is aware of virtualization, and is tailored for the paravirtualized environment. ... Hardware (Native) Operating System ...

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JN Herder, H Bos, B Gras, P Homburg, AS Tanenbaum - DSN'07 - [doi.ieeecomputersociety.org](#)

... isolation by running each driver in a dedicated, paravirtualized operating system and ... and describe the recovery procedure as implemented by the native M INIX ...

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SVS Altiris, FQ Beilard - [training - media.wiley.com](#)

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K Fraser, S Hand, R Neugebauer, I Pratt, A ... - [leiti.org](#)

Page 1. Submitted to OSDI'04 Reconstructing I/O Keir Fraser, Steven Hand, Rolf Neugebauer , Ian Pratt, Andrew Warfield, Mark Williamson ...

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[PDF] [Automated Grid Population Using rBuilder](#)

S Gott, K VanDine, M Johnson - [wiki.rpath.com](#)

... In paravirtualized environments, the kernel running in the guest must be compatible with ... We would also like to produce grid-native target images, for example ...

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